

Title (en)
Magnet assembly

Title (de)
Anordnung von Magneten

Title (fr)
Ensemble d'aimants

Publication
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Application
EP 95303908 A 19950607

Priority
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Abstract (en)
A magnet assembly comprises a pair of substantially aligned, spaced apart first magnets (1) having like poles facing each other; and one or more auxiliary magnets (2) axially aligned with the first magnets wherein all magnets in the assembly are axially aligned, whereby a magnetic field of sufficient homogeneity to perform a nuclear magnetic resonance (NMR) process is generated in a working region (6) laterally offset from the first and second magnets. An oscillating magnetic field generating assembly for performing an NMR experiment includes a set of electrical coils (3) connected to an oscillating electrical source (7), the coils being arranged between the first magnets (1) and such that the magnetic field generated by the oscillating magnet field generating assembly is also sufficiently uniform within the working region (6) to perform an NMR experiment. A shield (5) of electrically conductive material is positioned adjacent to and laterally offset from the set of electrical coils (3,4) whereby the magnetic field generated by the oscillating magnetic field generating means is asymmetrically offset from the axis of the first magnets (1). <IMAGE>

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IPC 8 full level
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Citation (applicant)
• US 4350955 A 19820921 - JACKSON JASPER A, et al
• WO 9207279 A1 19920430 - OXFORD INSTR LTD [GB]
• US 4933638 A 19900612 - KLEINBERG ROBERT L [US], et al
• WO 9418577 A1 19940818 - OXFORD INSTR UK LTD [GB], et al
• WO 9314413 A1 19930722 - OXFORD INSTR UK LTD [GB]
• WO 9411748 A1 19940526 - OXFORD INSTR PLC [GB], et al

Citation (search report)
• [X] EP 0459064 A1 19911204 - SCHLUMBERGER LTD [US], et al
• [DA] WO 9411748 A1 19940526 - OXFORD INSTR PLC [GB], et al
• [DX] WO 9207279 A1 19920430 - OXFORD INSTR LTD [GB]
• [A] US 4350955 A 19820921 - JACKSON JASPER A, et al
• [X] R.L. KLEINBERG ET AL.: "Novel NMR Apparatus for Investigating an External Sample", JOURNAL OF MAGNETIC RESONANCE, vol. 97, DULUTH, USA, pages 466 - 485, XP023960894, DOI: doi:10.1016/0022-2364(92)90028-6

Cited by
CN108459041A; FR2762912A1; FR2837929A1; EP0774671A1; US5739687A; GB2449032A; FR2752946A1; GB2449032B; US9519075B2; WO2015171124A1; US7405563B2; WO2006043275A3; WO2007098204A1

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